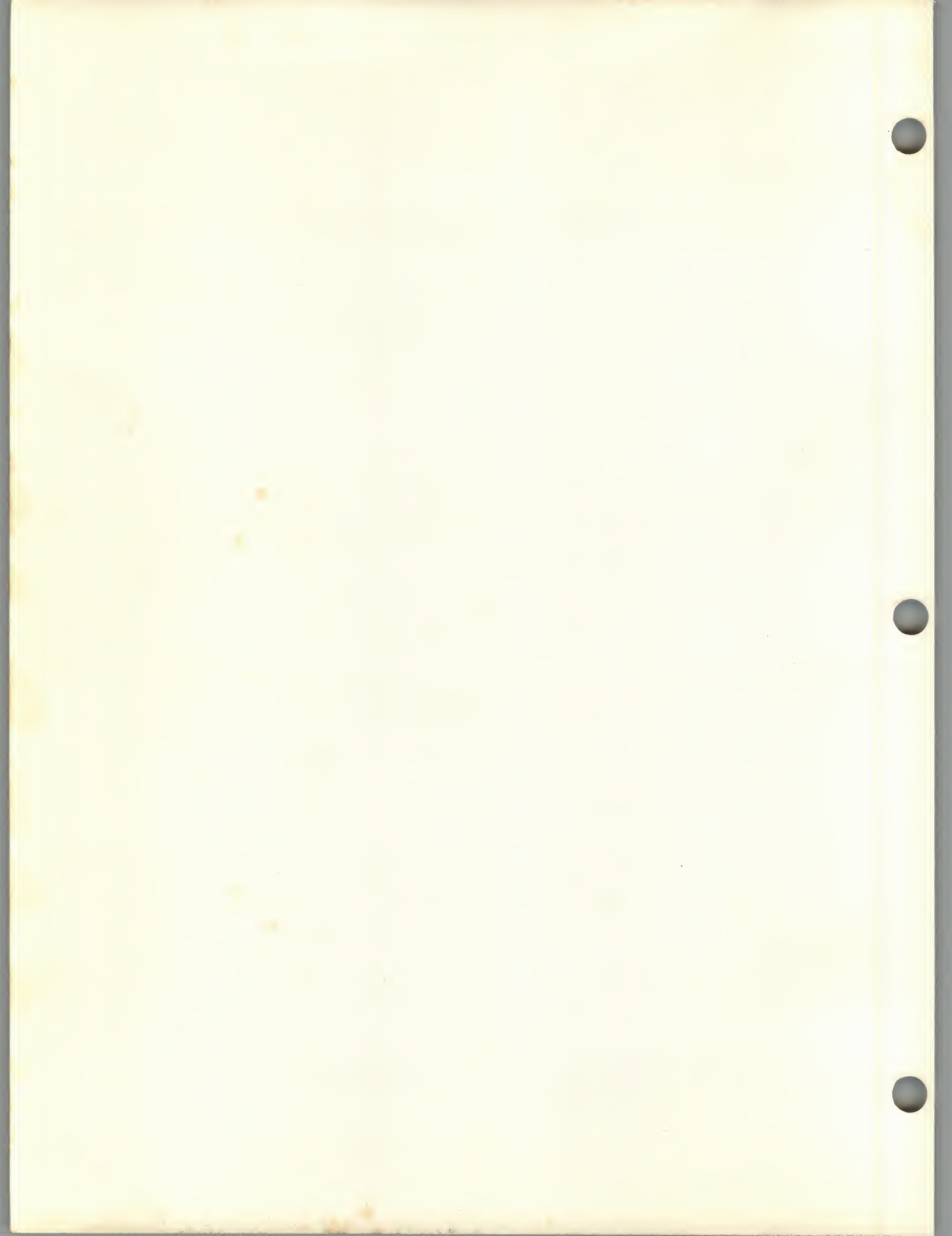


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IPI8-1000 1-Gigabyte Disk Drive Configuration Procedures







IPI8-1000 1-Gigabyte Disk Drive Configuration Procedures

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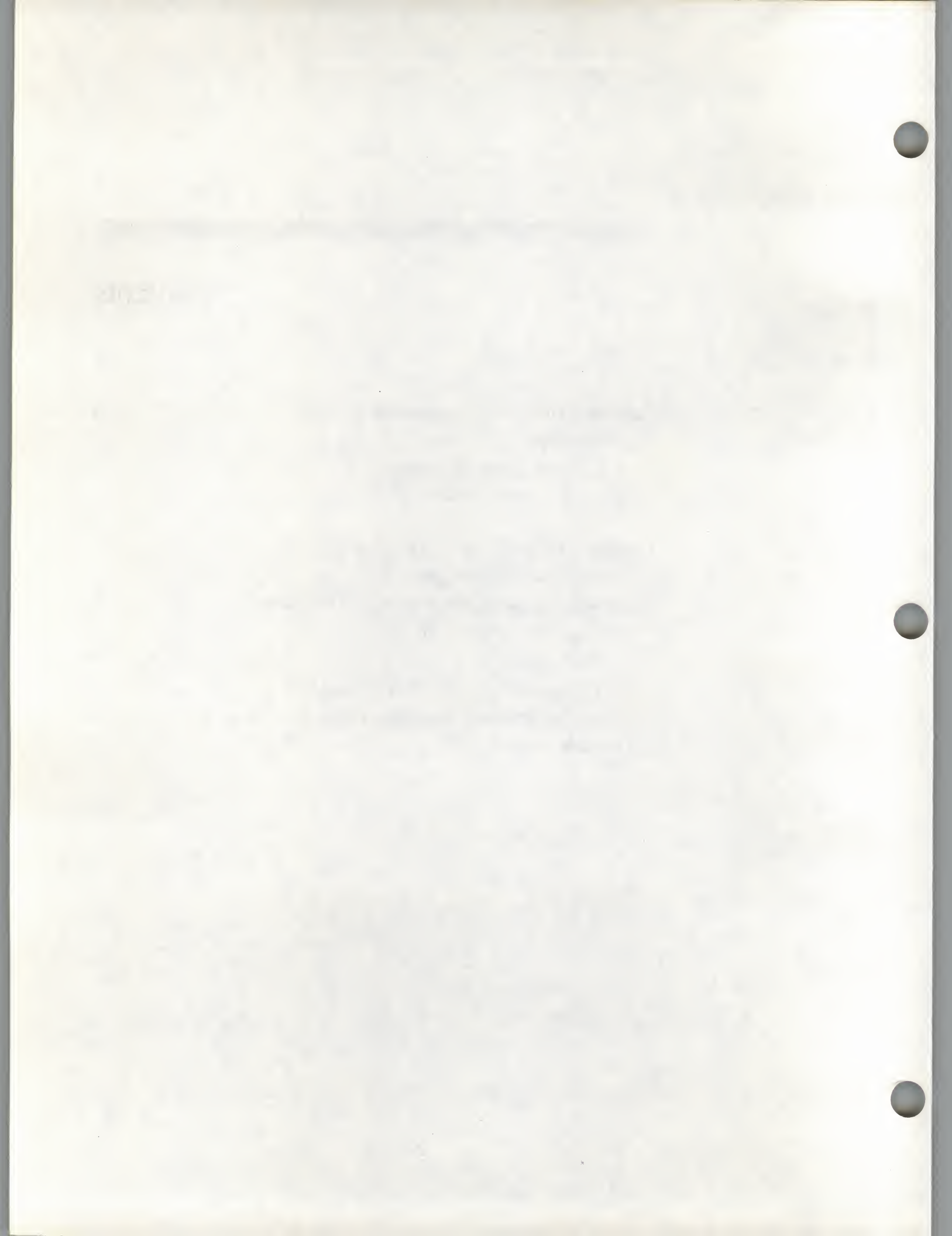
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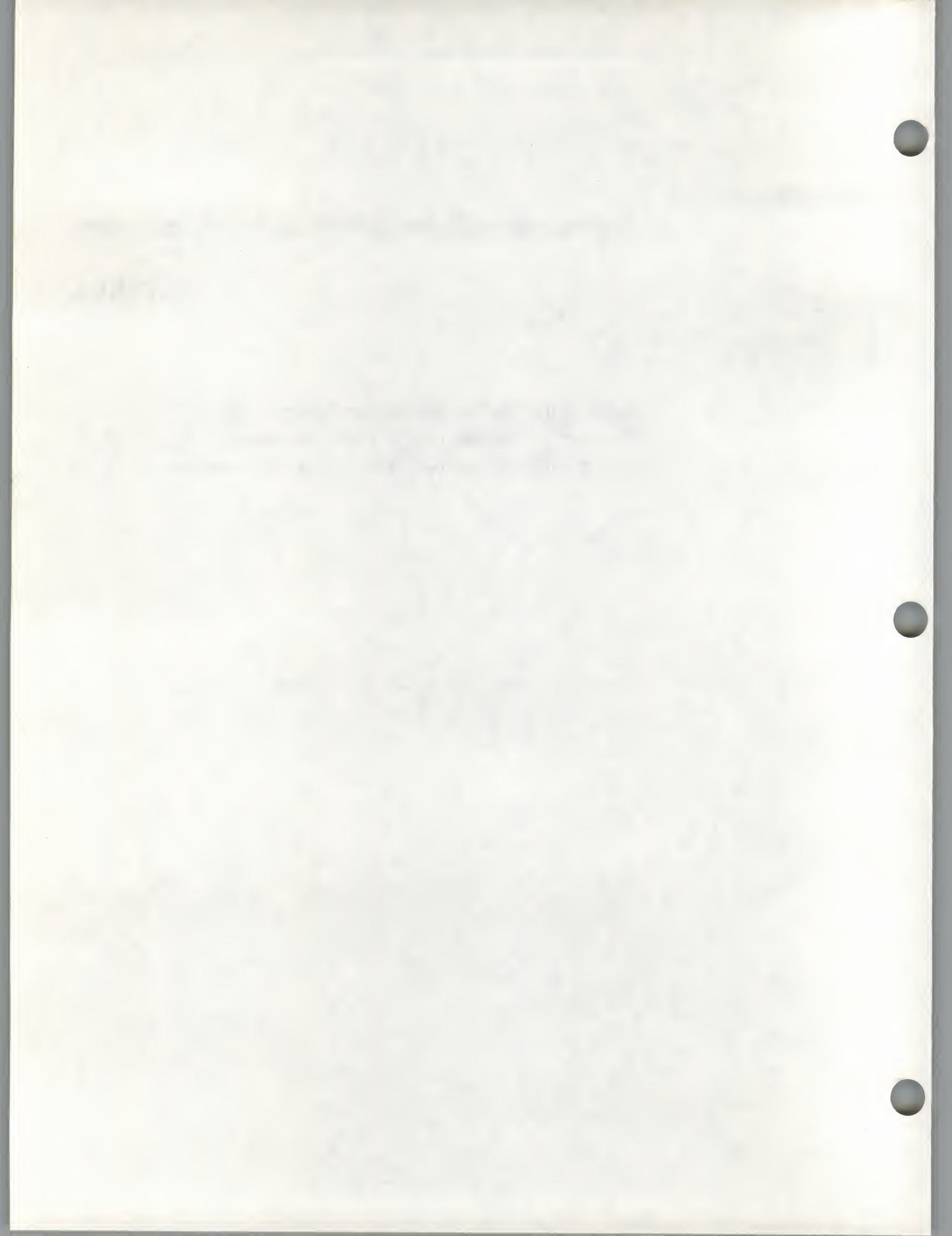
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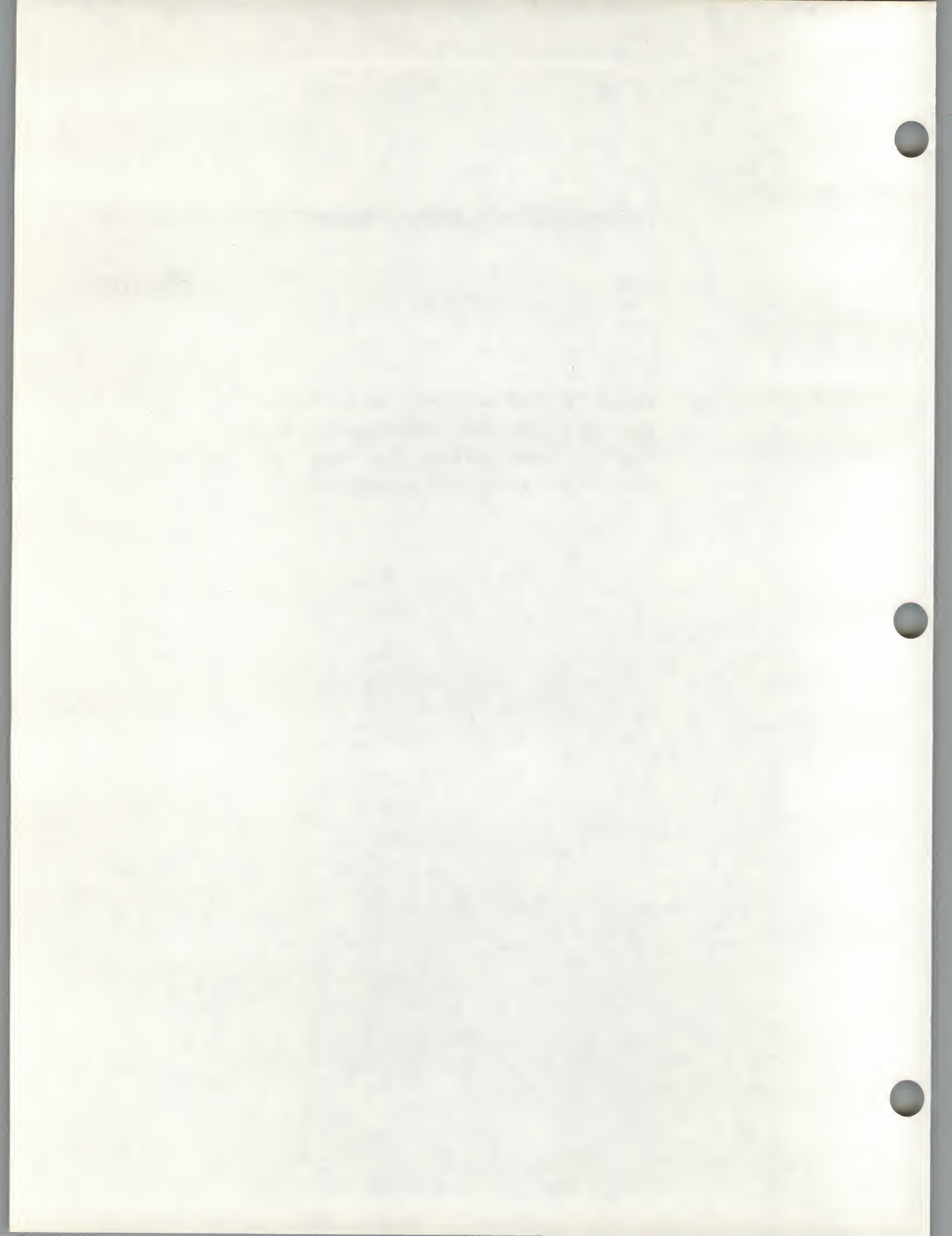
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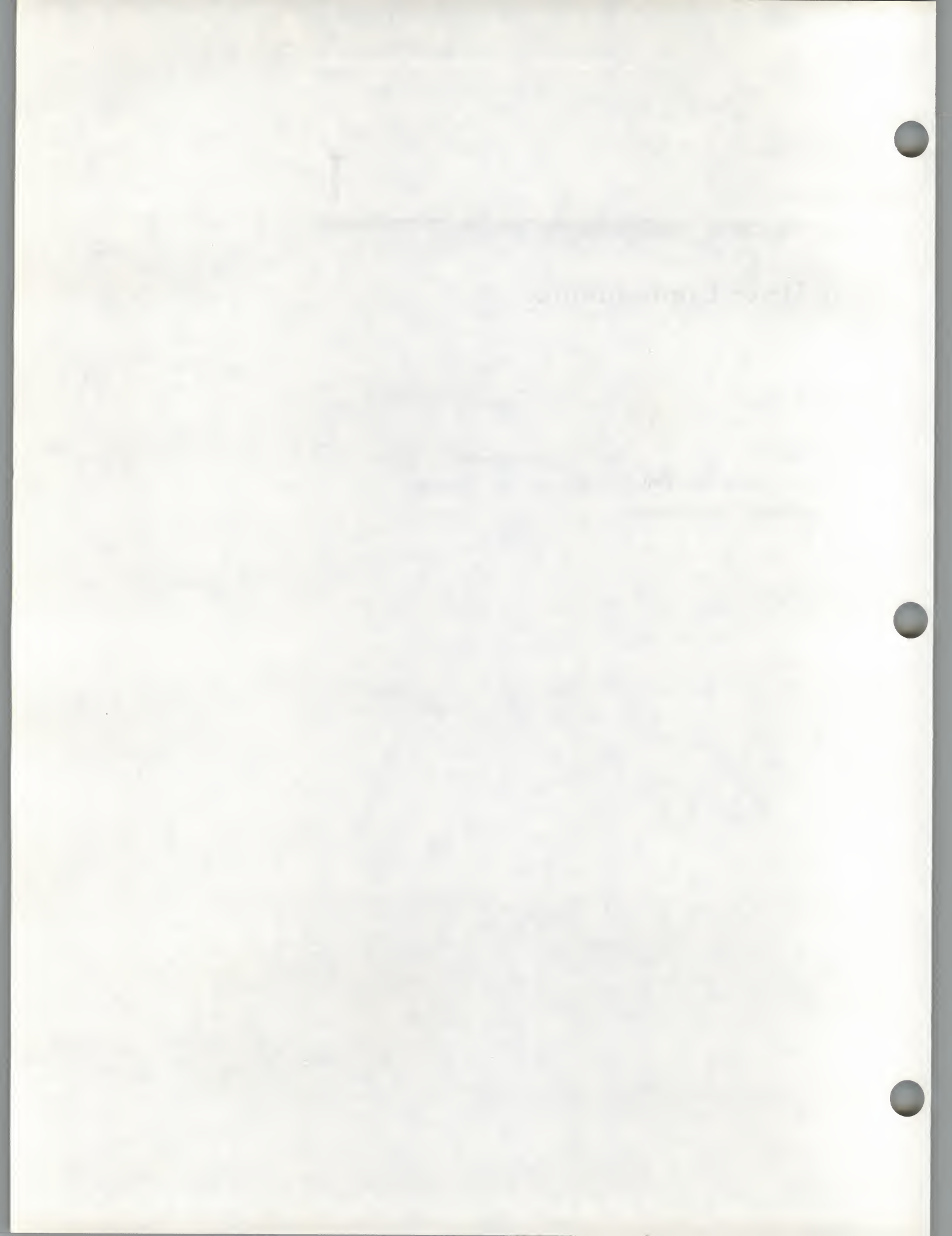
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Disk Drive Configuration

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Disk Drive Configuration

Disk drive configuration consists of setting the *address* switches on the drive and verifying that the rest of the switches are set correctly.

1.1. Orientation

When referring to the disk drive, all directions (such as top, bottom, left and right) are given as though looking at the drive's front panel (unless stated otherwise).

1.2. Locations of Address Switches

There is a small removable plastic cover in the drive's top cover. One set of *address* switches is located on the board below this cover. (Refer to Figure 2-1). Be sure these switches are set to the factory settings before you install the drive in the rack. The other *address* switch is located on the operator panel on the front of the drive. (Refer to Figure 2-3). Use this switch if you want to change the drive's address later, when the drive is installed and running. If there is a front panel, it overrides the address, fault, clear, and write-protect switches.

1.3. Locations of Other Switches

The factory-set *sector*, *N/WP*, and *B8* (or *B/C*) switches are located next to the address switches on the board below the plastic cover. (Refer to Figure 2-1). The factory-set *I/O board* switches are located on the left side of the drive's rear panel. (Refer to Figure 2-2). The *operator* switches are located on the operator panel on the front of the drive. (Refer to Figure 2-3). The power supply's *on/standby* switch is located on the end of the power supply, behind the operator panel. (Refer to Figure 2-4).

Before installing a drive, verify that the switches on the drive are properly set. If any switch is not properly set, you will need to set it.

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Setting the Drive's Switches

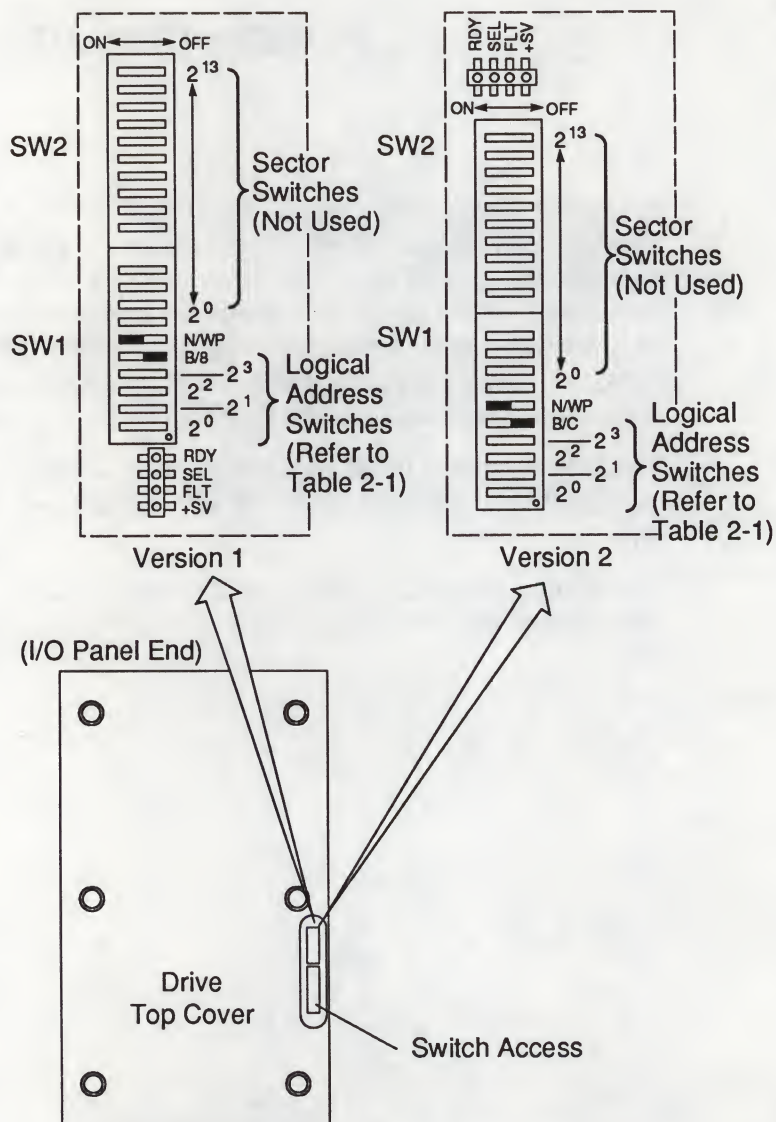
2.1. Setting the Drive Address

Before you install a disk drive, be sure that it is set to the appropriate address. The address is set with Switch 1, dip switches 1 – 4 (logical address switches 0 – 3), located on the disk-drive control board, as shown in Figure 2-1. Switch 1 is accessible from the top of the disk drive by prying off the plastic cover over the switches with a small screwdriver. The switch address settings are shown in Table 2-1. Use these switches to set the drive's address if you do not have access to the push-button switch on the front panel.

The address can also be set via the front panel. The front panel push buttons override the address, fault, clear, and write-protect switches located on top of the drive.

After setting the selected address via the front panel, the power must be cycled (power down the drive, then power it back up) in order for the changes to take effect.

Figure 2-1 IPI8-1000 Disk Drive Address Switches Locations



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Table 2-1 IPI8-1000 Disk Drive Address Switches Settings

IPI8-1000 Disk Drive Address Switch Settings (Switch 1)				
Logical Address	Switch Settings			
	4	3	2	1
0	Off	Off	Off	Off
1	Off	Off	Off	On
2	Off	Off	On	Off
3	Off	Off	On	On
4	Off	On	Off	Off
5	Off	On	Off	On
6	Off	On	On	Off
7	Off	On	On	On

NOTE The switches described in Table 2-1, above, and shown in Figure 2-1 on the previous page may be labelled either "On/Off" or "Open/Closed". Note that ON is equivalent to CLOSED, and OFF is equivalent to OPEN.

2.2. Setting the Sector, N/WP, and B/8 (or B/C) Switches

Before you install a disk drive, verify that the N/WP switch is still set to the factory setting (ON). (The setting of the sector and the B/8 or B/C switches (both OFF) are immaterial because these switches are not used by the drive.) The sector, N/WP, and B/8 (or B/C) switches are accessible from the top of the disk drive by prying off the plastic cover over the switches with a small screwdriver. Note in Figure 2-1 that there are two versions of control boards used in these drives. While the switch settings are identical, the locations of the switches are slightly different.

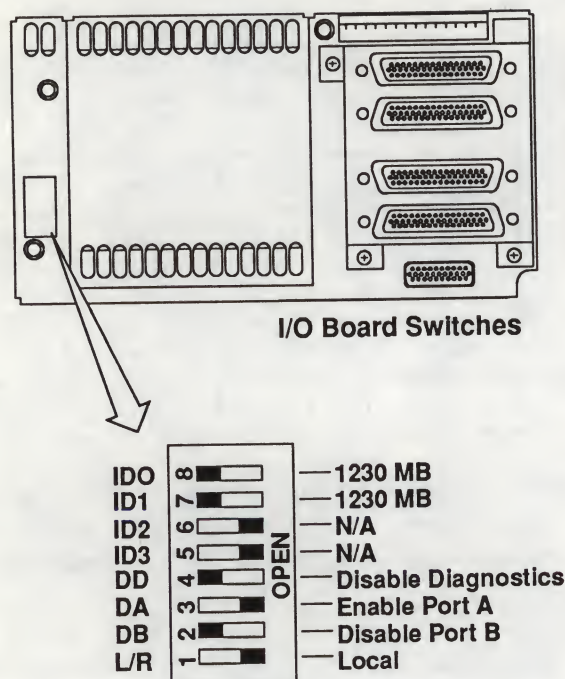
2.3. Setting the I/O Board Switches

Before you install a disk drive, verify that the I/O board switches are set correctly. The I/O board switches can be seen through a slot in the left side of the drive's rear panel.

Switch Settings

The Sun Microsystems factory settings for the I/O board switches are shown in Figure 2-2 and described in Table 2-2.

Figure 2-2 IPI8-1000 Disk Drive I/O Board Switch Settings



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NOTE The switch shown in Figure 2-2, above, and described in Table 2-2 on the following page may be labelled either "On/Off" or "Open/Closed". Note that ON is equivalent to CLOSED, and OFF is equivalent to OPEN.

Table 2-2 *IPI8-1000 Disk Drive I/O Board Switch Usage*

<i>IPI8-1000 Disk Drive I/O Board Switch Usage</i>		
Switch Segment	Segment Setting	Effect of Segment Setting
1 (LR)	Off/Open = Local mode	The drive starts when you press the operator START switch or apply DC power.
	On/Closed = Remote mode	The drive will not start until it receives a start command from the controller board.
2 (DB)	Off/Open = Enable port B	The drive's port B is enabled for normal operation.
	On/Closed = Disable port B	The drive's port B is disabled.
3 (DA)	Off/Open = Enable port A	The drive's port A is enabled for normal operation.
	On/Closed = Disable port A	The drive's port A is disabled.
4 (DD)	Off/Open = Enable diagnostic R/W	Allows drive's internal diagnostics to read and write to the drive.
	On/Closed = Disable diagnostic R/W	Prevents drive's internal diagnostics from reading or writing to the drive.
5 (ID3) 6 (ID2) 7 (ID1) 8 (ID0)	ID3 = Off/Open ID2 = Off/Open ID1 = On/Closed ID0 = On/Closed	Sets the 1 Gigabyte drive's unique ID (device configuration code). Factory setting. Do not change.

2.4. Using the Operator Panel Switches and LEDs

The operator panel is located on the front of the drive, just to the right of the blue plastic front cover. The touch switches on the operator panel are not factory set. These switches are included so that the operator has some control over what the drive is doing. The LEDs are included so the operator can have some knowledge of the status of the drive. The operator panel switches and LEDs are shown in Figure 2-3. Their use is explained in Table 2-3.

Figure 2-3 IPI8-1000 Disk Drive Operator Panel LEDs and Switches

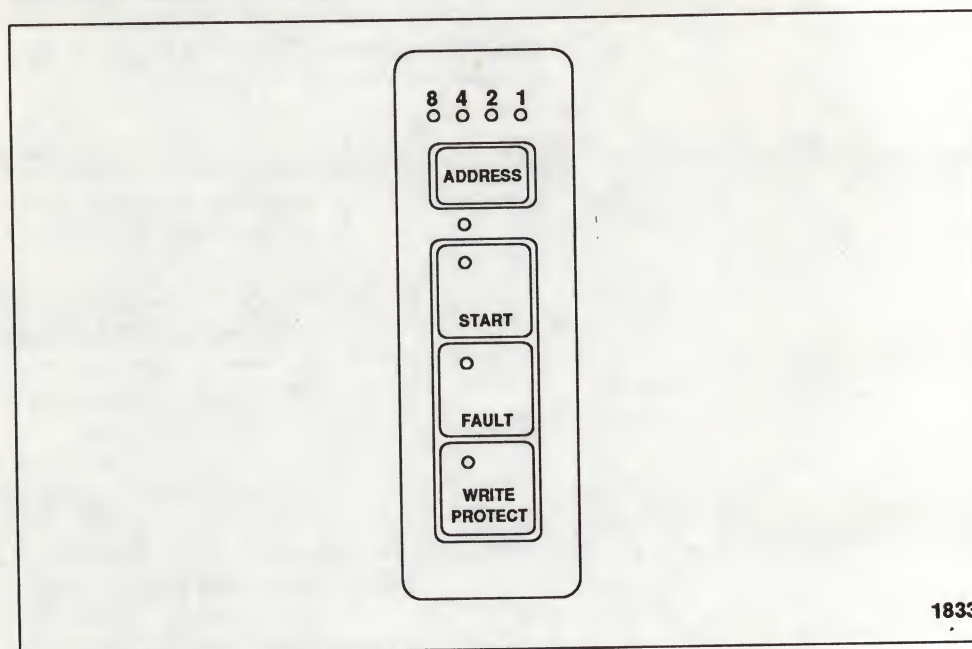


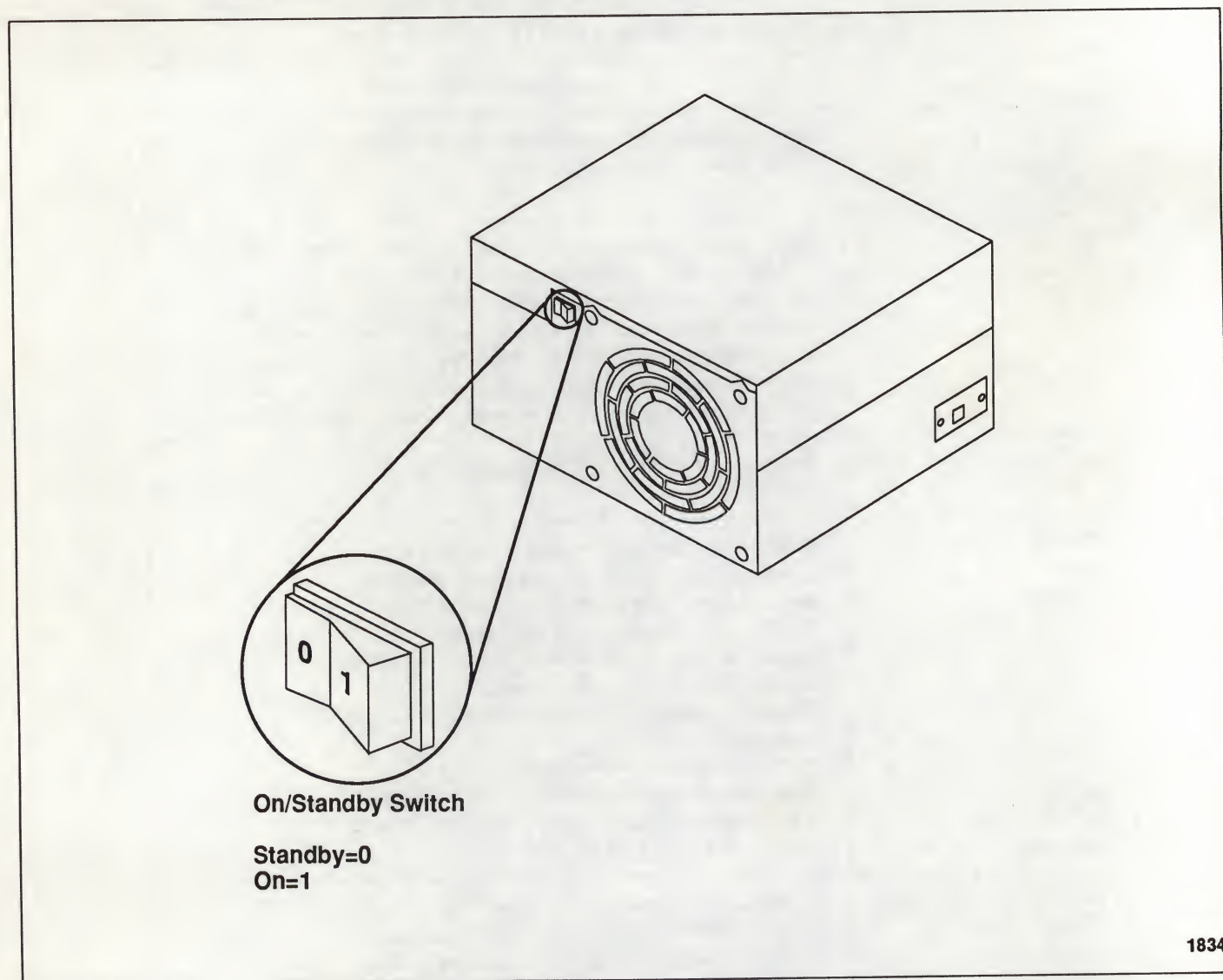
Table 2-3 *IPI8-1000 Disk Drive Operator Panel LEDs and Switches*

<i>IPI8-1000 Disk Drive Operator Panel LEDs and Switches</i>	
Name	Description and Usage
Logical Address LEDs	Show in binary representation the logical address of this drive.
ADDRESS Selector Switch	Pressing and holding this switch for 2-3 seconds advances the address. Pressing and holding this switch longer than 3 seconds advances the address continuously. Watch the address-indicator LEDs to determine the drive's address. NOTE that in order for your address change to remain in effect, the drive itself must be powered down and back up again. Powering down the entire system (as opposed to just the drive) will not change the address.
SELECTed LED	When this drive is selected by the controller, this LED will be lit.
START Switch and LED	If the drive is running, pressing this switch will stop the drive. If the drive is stopped, pressing this switch will start the drive and turn on the READY LED. During power up, this LED should flash rapidly for no more than 60 seconds and then turn off. During power down, this LED should flash slowly for no more than 60 seconds and then turn off.
FAULT Switch and LED	When a drive fault is detected, this LED will light. If the fault was transient or was corrected, pressing this switch will turn off the LED.
WRITE PROTECT Switch and LED	If the LED is OFF, the drive is not write-protected. Press the switch once to turn on write protect and the LED. Press again to turn off write protect and turn off the LED.

2.5. Drive Power Supply On/Standby Switch

The drive power supply *on/standby* switch toggles the drive's power supply between on and standby. When the switch is in the *on* position, all parts of the drive receive full normal power from the power supply. When the power supply switch is in the *standby* position, the drive receives no power to its drive motor. However, the drive electronics are still fully powered.

Figure 2-4 *Drive Power Supply On/Standby Switch*

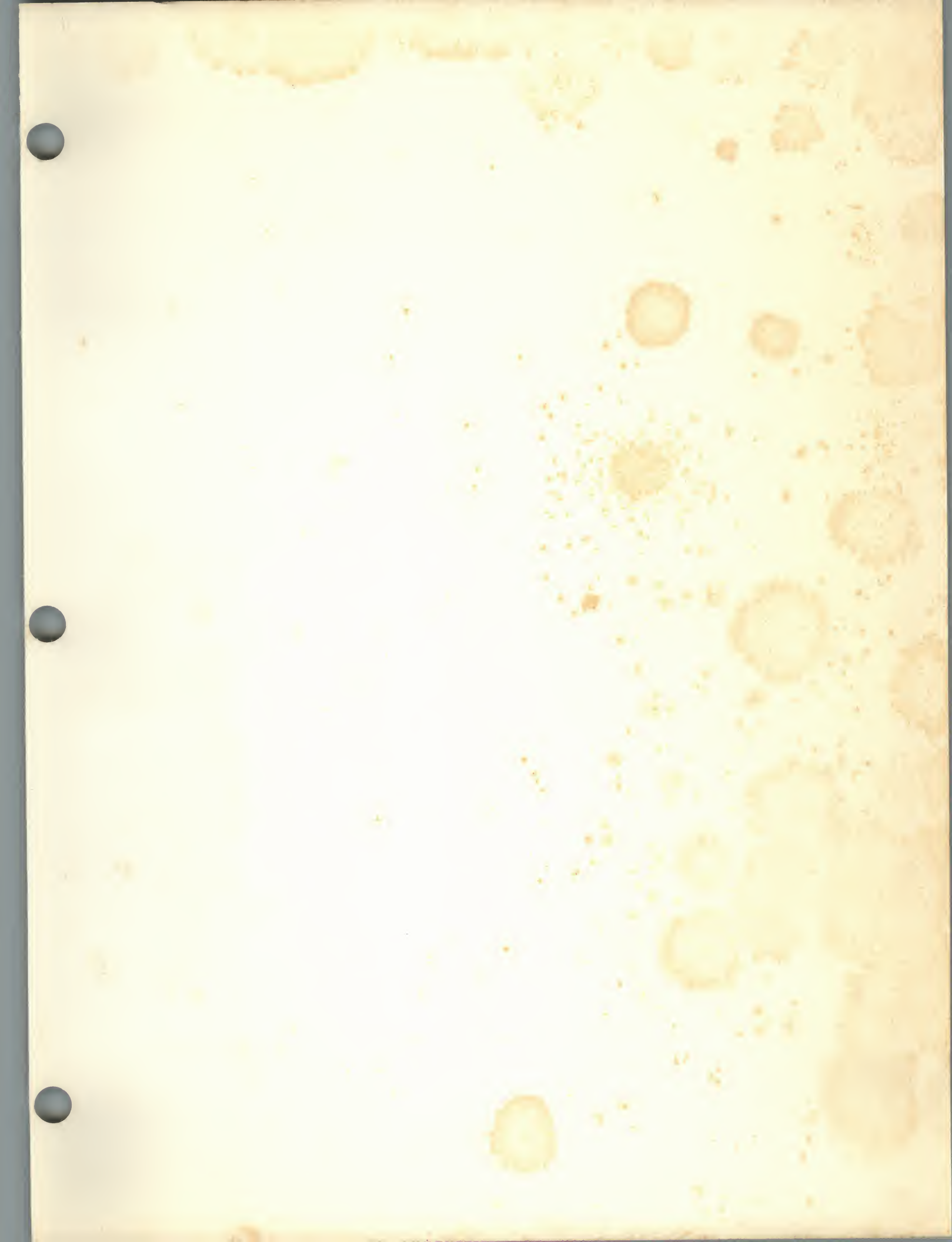


2.6. Additional Information

Additional information about this drive can be found in the other manuals that were packaged with this drive.

Revision History

<i>Dash Number</i>	<i>Revision</i>	<i>Date</i>	<i>Comments</i>
01	01	15 February 1989	Review Draft
02	01	27 March 1989	Alpha Review
03	01	17 April 1989	Alpha Review
05	50	9 June 1989	Beta Review
06	50	28 August 1989	Review Draft
10	A	26 September 1989	First Customer Shipment



Corporate Headquarters

Sun Microsystems, Inc.
2550 Garcia Avenue
Mountain View, CA 94043
415 960-1300
TLX 37-29639

For U.S. Sales Office

locations, call:
800 821-4643
In CA: 800 821-4642

European Headquarters

Sun Microsystems Europe, Inc.
Bagshot Manor, Green Lane
Bagshot, Surrey GU19 5NL
England
0276 51440
TLX 859017

Australia: (02) 413 2666

Canada: 416 477-6745

France: (1) 40 94 80 00

Germany: (089) 95094-0

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